G-12 Counterfeit Parts Activity

Prepared for PSMC Meeting

San Diego, CA October 25, 2007

Presenter

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G-12 Committee Vice Chair

Background

- Task Group formed May 2006
- Decision was made to generate a Standard
  - Admittedly, a comprehensive Standard is outside of our charter
  - Evolved into an Engineering Bulletin (EB)
- Meetings held to investigate problem
- Draft EB out for ballot “imminently”

Findings, 1

- Scope of counterfeit activities not widely appreciated
  - In 2004 estimate was 5-7% of sales = $512B
  - Counterfeit goods seized by DHS = $140M
    - 70% originated in China
  - In 1991, 192,000 people in China died from consuming counterfeit medicine.
  - 750,000 jobs lost in US due to counterfeiting
  - Problems with wine, consumer goods, and software overshadow other items
  - Searching for “Counterfeit Parts” on Yahoo yields over 1.65M hits
  - Counterfeit parts usually sell for 50% or less of genuine parts, creating intense pressure
  - ITAR restrictions have increase the demand for counterfeit parts
  - 46% of suppliers on the DKSP are “independent distributors” i.e. “brokers”

Findings, 2

- Multiple ways to Counterfeit
  - Reclamation (Citiraya)
  - Joint ventures (make more than license allows)
  - Remarking (100MHZ part becomes 200MHZ)
  - Reverse counterfeiting
  - Underground (literally) and mobile operations
  - Theft (and threats)
- Organized Crime and Terrorist links not publicized

Findings, 3

Case Study

- 2004 J S Enterprise in Philipines
  - Over 10M ICs seized
  - Many (Most? All?) were stolen
  - Semiconductor manufacturer manager(s) targeted for assassination
  - More details on G-12 website, January 2007 minutes: http://66.34.169.103/sstc/G12/g12p/#minutes
    - (Login = G12, Password = EIA5962)

Engineering Bulletin draft

DEFINITION:

A counterfeit item is one whose identity or pedigree has been deliberately altered or misrepresented by its supplier.

- ***Identity***: *Original manufacturer, part number, date code, lot number, testing, inspection, documentation, or warranty, etc.*

- ***Pedigree***: *Origin, ownership history, storage, handling, physical condition, previous use, etc.*

Engineering Bulletin draft

Three Sections:

- **1. Prevention:**
  - Actions recommended for procuring parts and materials with a full warranty.
  - Actions recommended for minimizing risks and protecting your Program from counterfeiting.
  - Actions recommended when buying from a non-authorized supplier.
- **2. Detection:**
  - Actions recommended when procuring parts from an unauthorized supplier or otherwise suspect that a part or material at risk of being counterfeit has been procured.
- **3. Risk Mitigation**
  - Actions recommended when no reasonable alternatives exist (e.g. a redesign is required, an unacceptable schedule delay will result, the program or customer cannot bear the additional cost) and the decision has been made to procure from a non-authorized supplier.

Engineering Bulletin draft

The Team's Recommendation:

The G-12 Counterfeit Task Group has unanimously agreed that:

- **The only control or safeguard is to only procure from the Original Equipment Manufacturer (OEM) or their designated franchisees. All other procurement approaches offer significant risk.**

- **Any part or material that has been out of the OEM's authorized supply chain has some risk of not fulfilling its intended mission objectives.**

Future

- FAR problems
  - Ownership and return
  - (removed) offered to help
- GIDEP Reporting in its infancy
- Engineering Bulletin in ballot
- G-12 has no intention of continuing effort
- G-12 willing to support other anti-Counterfeit efforts and rescind EB when replaced by an Industry Standard